Colin D. Campbell

List of Publications by Year
in descending order

112	13,567	31976 53	23533 111
papers	citations	h-index	g-index

112	112	112	14106
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microbial diversity drives multifunctionality in terrestrial ecosystems. Nature Communications, 2016, 7, 10541.	12.8	1,365
2	Selective influence of plant species on microbial diversity in the rhizosphere. Soil Biology and Biochemistry, 1998, 30, 369-378.	8.8	1,001
3	An arbuscular mycorrhizal fungus accelerates decomposition and acquires nitrogen directly from organic material. Nature, 2001, 413, 297-299.	27.8	945
4	A Rapid Microtiter Plate Method To Measure Carbon Dioxide Evolved from Carbon Substrate Amendments so as To Determine the Physiological Profiles of Soil Microbial Communities by Using Whole Soil. Applied and Environmental Microbiology, 2003, 69, 3593-3599.	3.1	633
5	Bacterial diversity promotes community stability and functional resilience after perturbation. Environmental Microbiology, 2005, 7, 301-313.	3.8	429
6	Accounting for variability in soil microbial communities of temperate upland grassland ecosystems. Soil Biology and Biochemistry, 2001, 33, 533-551.	8.8	415
7	The identification of 100 ecological questions of high policy relevance in the UK. Journal of Applied Ecology, 2006, 43, 617-627.	4.0	395
8	Microbial Biomass and Community Structure in a Sequence of Soils with Increasing Fertility and Changing Land Use. Microbial Ecology, 2000, 40, 223-237.	2.8	382
9	Links between Ammonia Oxidizer Community Structure, Abundance, and Nitrification Potential in Acidic Soils. Applied and Environmental Microbiology, 2011, 77, 4618-4625.	3.1	357
10	Assessing shifts in microbial community structure across a range of grasslands of differing management intensity using CLPP, PLFA and community DNA techniques. Applied Soil Ecology, 2004, 25, 63-84.	4.3	331
11	Use of rhizosphere carbon sources in sole carbon source tests to discriminate soil microbial communities. Journal of Microbiological Methods, 1997, 30, 33-41.	1.6	325
12	Effect of Metal-Rich Sludge Amendments on the Soil Microbial Community. Applied and Environmental Microbiology, 1998, 64, 238-245.	3.1	313
13	Antibiotic Resistance Gene Abundances Correlate with Metal and Geochemical Conditions in Archived Scottish Soils. PLoS ONE, 2011, 6, e27300.	2.5	310
14	Deterministic processes vary during community assembly for ecologically dissimilar taxa. Nature Communications, 2015, 6, 8444.	12.8	278
15	It is elemental: soil nutrient stoichiometry drives bacterial diversity. Environmental Microbiology, 2017, 19, 1176-1188.	3.8	242
16	Endophytic bacterial diversity in poplar trees growing on a BTEX-contaminated site: The characterisation of isolates with potential to enhance phytoremediation. Systematic and Applied Microbiology, 2006, 29, 539-556.	2.8	238
17	Potential bias of fungal 18S rDNA and internal transcribed spacer polymerase chain reaction primers for estimating fungal biodiversity in soil. Environmental Microbiology, 2003, 5, 36-47.	3.8	235
18	Loss of microbial diversity in soils is coincident with reductions in some specialized functions. Environmental Microbiology, 2014, 16, 2408-2420.	3.8	232

#	Article	IF	Citations
19	Selecting biological indicators for monitoring soils: A framework for balancing scientific and technical opinion to assist policy development. Ecological Indicators, 2009, 9, 1212-1221.	6.3	227
20	Colonisation of poplar trees by gfp expressing bacterial endophytes. FEMS Microbiology Ecology, 2004, 48, 109-118.	2.7	210
21	The influence of vegetation type, soil properties and precipitation on the composition of soil mite and microbial communities at the landscape scale. Journal of Biogeography, 2010, 37, 1317-1328.	3.0	197
22	Functional biodiversity of microbial communities in the rhizospheres of hybrid larch (Larix eurolepis) and Sitka spruce (Picea sitchensis). Tree Physiology, 1996, 16, 1031-1038.	3.1	181
23	Diversity of fungi in organic soils under a moorland - Scots pine (Pinus sylvestris L.) gradient. Environmental Microbiology, 2003, 5, 1121-1132.	3.8	166
24	Use of Multiplex Terminal Restriction Fragment Length Polymorphism for Rapid and Simultaneous Analysis of Different Components of the Soil Microbial Communityâ–¿. Applied and Environmental Microbiology, 2006, 72, 7278-7285.	3.1	146
25	Multiâ€factorial drivers of ammonia oxidizer communities: evidence from a national soil survey. Environmental Microbiology, 2013, 15, 2545-2556.	3.8	141
26	Microbial communities in different soil types do not converge after diesel contamination. Journal of Applied Microbiology, 2002, 92, 276-288.	3.1	131
27	Environmental and spatial characterisation of bacterial community composition in soil to inform sampling strategies. Soil Biology and Biochemistry, 2009, 41, 2292-2298.	8.8	130
28	Changes in soil microbial biomass and microbial activities in response to 7 years simulated pollutant nitrogen deposition on a heathland and two grasslands. Environmental Pollution, 1998, 103, 239-250.	7.5	128
29	Climate change cannot be entirely responsible for soil carbon loss observed in England and Wales, 1978â€“2003. Global Change Biology, 2007, 13, 2605-2609.	9.5	126
30	Is vegetation composition or soil chemistry the best predictor of the soil microbial community?. Plant and Soil, 2010, 333, 417-430.	3.7	121
31	Microbial indicators of heavy metal contamination in urban and rural soils. Chemosphere, 2006, 63, 1942-1952.	8.2	117
32	Rock fragments in soil support a different microbial community from the fine earth. Soil Biology and Biochemistry, 2004, 36, 1119-1128.	8.8	111
33	The Enigma of Soil Animal Species Diversity Revisited: The Role of Small-Scale Heterogeneity. PLoS ONE, 2010, 5, e11567.	2.5	108
34	Assessing CLPPs using MicroRespâ„¢. Journal of Soils and Sediments, 2007, 7, 406-410.	3.0	107
35	Arctic microorganisms respond more to elevated UV-B radiation than CO2. Nature, 2002, 416, 82-83.	27.8	102
36	FTIR spectroscopy of peat in and bordering Scots pine woodland: relationship with chemical and biological properties. Soil Biology and Biochemistry, 2001, 33, 1193-1200.	8.8	92

#	Article	IF	Citations
37	Soil genomics. Nature Reviews Microbiology, 2009, 7, 756-756.	28.6	92
38	Characterisation and microbial utilisation of exudate material from the rhizosphere of Lolium perenne grown under CO2 enrichment. Soil Biology and Biochemistry, 1998, 30, 1033-1043.	8.8	91
39	Combined microbial community level and single species biosensor responses to monitor recovery of oil polluted soil. Soil Biology and Biochemistry, 2004, 36, 1149-1159.	8.8	90
40	Cadmium availability to wheat grain in soils treated with sewage sludge or metal salts. Chemosphere, 2007, 66, 1415-1423.	8.2	82
41	Comparison of soil carbon stocks in <scp>S</scp>cottish soils between 1978 and 2009. European Journal of Soil Science, 2013, 64, 455-465.	3.9	75
42	Changes in Fungal Community Composition in Response to Vegetational Succession During the Natural Regeneration of Cutover Peatlands. Microbial Ecology, 2007, 54, 508-522.	2.8	74
43	The ecological engineering impact of a single tree species on the soil microbial community. Journal of Ecology, 2010, 98, 50-61.	4.0	67
44	Soil pH controls nitrification and carbon substrate utilization more than urea or charcoal in some highly acidic soils. Biology and Fertility of Soils, 2011, 47, 515-522.	4.3	67
45	Microbial biomass and metabolic quotient of soils under different land use in the Three Gorges Reservoir area. Geoderma, 2003, 115, 129-138.	5.1	66
46	Development of a novel, bioluminescence-based, fungal bioassay for toxicity testing. Environmental Microbiology, 2002, 4, 422-429.	3.8	63
47	Substrate utilisation profiles of microbial communities in peat are depth dependent and correlate with whole soil FTIR profiles. Soil Biology and Biochemistry, 2006, 38, 2958-2962.	8.8	63
48	Pine microsatellite markers allow roots and ectomycorrhizas to be linked to individual trees. New Phytologist, 2005, 165, 295-304.	7.3	62
49	Long term repeated burning in a wet sclerophyll forest reduces fungal and bacterial biomass and responses to carbon substrates. Soil Biology and Biochemistry, 2008, 40, 2246-2252.	8.8	62
50	Title is missing!. Plant and Soil, 1998, 203, 289-300.	3.7	61
51	Title is missing!. Environmental Geochemistry and Health, 1999, 21, 331-337.	3.4	58
52	Soil pore volume and the abundance of soil mites in two contrasting habitats. Soil Biology and Biochemistry, 2008, 40, 1538-1541.	8.8	58
53	The arbuscular mycorrhizal fungus Glomus hoi can capture and transfer nitrogen from organic patches to its associated host plant at low temperature. Applied Soil Ecology, 2011, 48, 102-105.	4.3	56
54	Population size of indigenous Rhizobium leguminosarum biovar trifolii in long-term field experiments with sewage sludge cake, metal-amended liquid sludge or metal salts: Effects of zinc, copper and cadmium. Soil Biology and Biochemistry, 2008, 40, 1670-1680.	8.8	52

#	Article	IF	Citations
55	Long-term impact of sewage sludge application on soil microbial biomass: An evaluation using meta-analysis. Environmental Pollution, 2016, 219, 1021-1035.	7.5	52
56	Initial results from a long-term, multi-site field study of the effects on soil fertility and microbial activity of sludge cakes containing heavy metals. Soil Use and Management, 2006, 22, 11-21.	4.9	50
57	The cascading effects of birch on heather moorland: a test for the top-down control of an ecosystem engineer. Journal of Ecology, 2007, 95, 540-554.	4.0	50
58	The effect of EDTA and fulvic acid on Cd, Zn, and Cu toxicity to a bioluminescent construct (pUCD607) of Escherichia coli. Chemosphere, 2000, 40, 319-325.	8.2	48
59	DNA- and RNA-derived assessments of fungal community composition in soil amended with sewage sludge rich in cadmium, copper and zinc. Soil Biology and Biochemistry, 2008, 40, 2358-2365.	8.8	47
60	Predictors of fine-scale spatial variation in soil mite and microbe community composition differ between biotic groups and habitats. Pedobiologia, 2012, 55, 83-91.	1.2	47
61	Development of QSARs to investigate the bacterial toxicity and biotransformation potential of aromatic heterocylic compounds. Chemosphere, 2001, 42, 885-892.	8.2	45
62	Use of luminescence-marked bacteria to assess copper bioavailability in malt whisky distillery effluent. Chemosphere, 1995, 31, 3217-3224.	8.2	43
63	Explaining the variation in the soil microbial community: do vegetation composition and soil chemistry explain the same or different parts of the microbial variation?. Plant and Soil, 2012, 351, 355-362.	3.7	42
64	The direct response of the external mycelium of arbuscular mycorrhizal fungi to temperature and the implications for nutrient transfer. Soil Biology and Biochemistry, 2014, 78, 109-117.	8.8	42
65	Prevalence and survival of potential pathogens in source-segregated green waste compost. Science of the Total Environment, 2012, 431, 128-138.	8.0	36
66	Afforestation of moorland leads to changes in crenarchaeal community structure. FEMS Microbiology Ecology, 2007, 60, 51-59.	2.7	35
67	Microbial DNA profiling by multiplex terminal restriction fragment length polymorphism for forensic comparison of soil and the influence of sample condition. Journal of Applied Microbiology, 2008, 105, 813-821.	3.1	35
68	Native woodland expansion: soil chemical and microbiological indicators of change. Soil Biology and Biochemistry, 2003, 35, 753-764.	8.8	34
69	Linking biosensor responses to Cd, Cu and Zn partitioning in soils. Environmental Pollution, 2006, 142, 493-500.	7.5	34
70	Long-term exposure to Zn-spiked sewage sludge alters soil community structure. Soil Biology and Biochemistry, 2007, 39, 2576-2586.	8.8	33
71	Comparison of response of six different luminescent bacterial bioassays to bioremediation of five contrasting oils. Journal of Environmental Monitoring, 2001, 3, 404-410.	2.1	32
72	Depth distribution of cherry (Prunus avium L.) tree roots as influenced by grass root competition. Plant and Soil, 2001, 231, 11-19.	3.7	32

#	Article	IF	Citations
73	Soil amendment affects Cd uptake by wheat â€" are we underestimating the risks from chloride inputs?. Science of the Total Environment, 2016, 554-555, 349-357.	8.0	31
74	A method for counting roots observed in minirhizotrons and their theoretical conversion to root length density. Plant and Soil, 1993, 153, 1-9.	3.7	30
75	Direct toxicity assessment of two soils amended with sewage sludge contaminated with heavy metals using a protozoan (Colpoda steinii) bioassay.. Chemosphere, 1997, 34, 501-514.	8.2	30
76	Characterisation of rhizobia from African acacias and other tropical woody legumes using Biologâ„¢ and partial 16S rRNA sequencing. FEMS Microbiology Letters, 1999, 170, 111-117.	1.8	29
77	Long term repeated prescribed burning increases evenness in the basidiomycete laccase gene pool in forest soils. FEMS Microbiology Ecology, 2009, 67, 397-410.	2.7	29
78	An inter-laboratory comparison of multi-enzyme and multiple substrate-induced respiration assays to assess method consistency in soil monitoring. Biology and Fertility of Soils, 2009, 45, 623-633.	4.3	28
79	Degradation of yew, ragwort and rhododendron toxins during composting. Science of the Total Environment, 2010, 408, 4128-4137.	8.0	26
80	Addition of a volcanic rockdust to soils has no observable effects on plant yield and nutrient status or on soil microbial activity. Plant and Soil, 2013, 367, 419-436.	3.7	26
81	The extended phenotype of Scots pine Pinus sylvestris structures the understorey assemblage. Ecography, 2006, 29, 451-457.	4.5	25
82	Multiple profiling of soil microbial communities identifies potential genetic markers of metal-enriched sewage sludge. FEMS Microbiology Ecology, 2008, 65, 555-564.	2.7	25
83	Effects of nitrogen fertiliser on tree/ pasture competition during the establishment phase of a silvopastoral system. Annals of Applied Biology, 1994, 124, 83-96.	2.5	24
84	Environmental risk factors in the incidence of Johneâ€™s disease. Critical Reviews in Microbiology, 2015, 41, 488-507.	6.1	23
85	Does the preferential microbial colonisation of ferromagnesian minerals affect mineral weathering in soil?. Die Naturwissenschaften, 2008, 95, 851-858.	1.6	22
86	Miniaturized test system for soil respiration induced by volatile pollutants. Environmental Pollution, 2006, 140, 269-278.	7.5	20
87	Degradation of metalaxyl-M in contrasting soils is influenced more by differences in physicochemical characteristics than in microbial community composition after re-inoculation of sterilised soils. Soil Biology and Biochemistry, 2010, 42, 1123-1131.	8.8	20
88	Risk assessment of the use of PAS100 green composts in sheep and cattle production in Scotland. Waste Management, 2012, 32, 117-130.	7.4	19
89	Seasonal dynamics of the soil microbial community: assimilation of old and young carbon sources in a longâ€term field experiment as revealed by natural <scp>¹³C</scp> abundance. European Journal of Soil Science, 2016, 67, 79-89.	3.9	19
90	The composting of tree bark in small reactorsâ€"adiabatic and fixed-temperature experiments. Biological Wastes, 1990, 31, 175-185.	0.2	18

#	Article	IF	Citations
91	The composting of tree bark in small reactorsâ€" self-heating experiments. Biological Wastes, 1990, 31, 145-161.	0.2	17
92	Radiocaesium in an organic soil and the effect of treatment with the fungicide â€˜Captanâ€™. Plant and Soil, 1995, 170, 315-322.	3.7	16
93	Land use and a low-carbon society. Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 2012, 103, 165-173.	0.3	16
94	Manual recording of minirhizotron data and its application to study the effect of herbicide and nitrogen fertiliser on tree and pasture root growth in a silvopastoral system. Agroforestry Systems, 1994, 26, 75-87.	2.0	15
95	Developmental window of response to predator chemical cues in rough-skinned newt embryos. Functional Ecology, 2007, 21, 880-885.	3.6	14
96	Soil physical factors affecting the growth of sycamore (Acer pseudoplatanus L.) in a silvopastoral system on a stony upland soil in North-East Scotland. Agroforestry Systems, 1993, 24, 295-306.	2.0	13
97	FragMatchâ€"a program for the analysis of DNA fragment data. Mycorrhiza, 2007, 17, 133-136.	2.8	12
98	Considerations for Scottish soil monitoring in the European context. European Journal of Soil Science, 2009, 60, 833-843.	3.9	10
99	Effect of heavy metal contamination on the rate of decomposition of sewage sludge and microbial activity. Applied Geochemistry, 1996, 11, 331-333.	3.0	9
100	How Resilient Are Microbial Communities to Temperature Changes During Composting?. , 2002, , 3-16.		9
101	Effect of nitrogen fertiliser on temporal and spatial variation of mineral nitrogen and microbial biomass in a silvopastoral system. Biology and Fertility of Soils, 1995, 19, 177-185.	4.3	8
102	Early-life residential exposure to soil components in rural areas and childhood respiratory health and allergy. Science of the Total Environment, 2014, 466-467, 338-344.	8.0	6
103	UV-B radiation and soil microbial communities. Nature, 2003, 423, 138-138.	27.8	5
104	Assessing biogas digestate, pot ale, wood ash and rockdust as soil amendments: effects on soil chemistry and microbial community composition. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 2015, 65, 383-399.	0.6	5
105	Investigating the specificity of regulators of degradation of hydrocarbons and hydrocarbon-based compounds using structure-activity relationships. Biodegradation, 2000, 11, 37-47.	3.0	4
106	Title is missing!. Environmental Geochemistry and Health, 2001, 23, 213-217.	3.4	4
107	Letters to the Editor: Comments on â€˜Baseline values and change in the soil, and implications for monitoringâ€™ by R.M. Lark, P.H. Bellamy & G.J.D. Kirk. European Journal of Soil Science, 2009, 60, 481-483.	3.9	4
108	Longâ€term Impact of Sewage Sludge Application on Rhizobium leguminosarum biovar trifolii: An Evaluation Using Metaâ€Analysis. Journal of Environmental Quality, 2016, 45, 1572-1587.	2.0	4

#	Article	IF	Citations
109	Scanning electron microscopy of the microbial colonization of composted tree bark. Micron, 1994, 25, 253-255.	2.2	3
110	Multiplex T-RFLP Allows for Increased Target Number and Specificity: Detection of Salmonella enterica and Six Species of Listeria in a Single Test. PLoS ONE, 2012, 7, e43672.	2.5	3
111	Distribution of soil invertase in relation to the root systems ofPicea sitchensis (Bong.) Carr. andAcer pseudoplatanus L. during development of young plants. Plant and Soil, 1994, 167, 73-77.	3.7	2
112	The effect of culture conditions on the mycelial growth and luminescence of naturally bioluminescent fungi. FEMS Microbiology Letters, 2001, 202, 165-170.	1.8	1